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| 10/544,192      | 08/02/2005  | Noriyuki Kikuchi     | 285-05              | 8340             |

7590 10/15/2007  
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| EXAMINER |
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CADUGAN, ERICA E

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| ART UNIT | PAPER NUMBER |
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3722

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| MAIL DATE | DELIVERY MODE |
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10/15/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/544,192 | <b>Applicant(s)</b><br>KIKUCHI, NORIYUKI |  |
|                              | <b>Examiner</b><br>Erica E. Cadugan  | <b>Art Unit</b><br>3722                  |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 August 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/9/07</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 3, "the extension" lacks sufficient antecedent basis in the claim.

In claim 2, lines 4-5, it is unclear as amended how many "pallet mounting surfaces" are being set forth, i.e., whether the pallet support member vertical mounting surfaces each include a pallet mounting surface or not.

Additionally, it is unclear in claim 2, line 5, as amended, (via the indefinite article "a", as opposed to a definite article --the-- or --said--) whether "a pallet mounting surface" is intended to be a subset of or different from the pallet mounting surfaces previously claimed.

***Terminal Disclaimer***

3. The terminal disclaimer filed on August 9, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on pending application serial number 10/541430 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Claim Rejections - 35 USC § 102***

4. Claims 1-2 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. Note that U.S. Patent Application Publication 2006/0260907 to Ota

(having no common inventor with the present application, but having a common assignee), which is the published version of application serial number 10/541,430 application, teaches every limitation of each of the present claims. See at least Figures 1-9 of the published Ota application.

5. Claims 1-2, 2 is as best understood in light of the above rejection under 35 USC 112, are rejected under 35 U.S.C. 102(b) as being anticipated by WO 02/00388 to Geiger et al.

WO '388 is not in the English language. However, U.S. Pat. No. 6,826,821 to Geiger et al. is in the same patent family, and is being relied upon as an English equivalent to the WO '388 reference. Thus, all references to column and line numbers herein are with respect to the '821 patent.

Geiger teaches a machine tool system including a plurality of machine tools 36 (36a-36f) laid out in various configurations (see Figures 4 and 14, for example; Figure 1 shows a detail of an individual machine tool 36). Note that Geiger teaches a machine tool having a horizontal main spindle 10 having a tool 16 mounted at a front end thereof, and "table" or "pallet-mounting plate" 26/29 is mounted "facing" the front surface of the spindle 10 (such that a vertical surface of 29 is perpendicular to the horizontal spindle axis as viewed in at least Figure 7), and detachably mounts a "pallet" 31 which has a vertical surface to/on which a workpiece 15 is affixed (see Figures 1, 7, noting that Figure 7 shows the table/pallet-mounting plate 26/29 positioned facing the spindle 10, noting also that 26 is a turntable device for rotating member 29 about a vertical axis.

Additionally, note that Geiger teaches various embodiments of a supply and take-down equipment arrangement or "pallet exchanger" 41, 61, 72 (see Figures 1 and 8-14) which are used

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to deliver a pallet 31 to or remove a pallet 31 from a desired machine tool 36a-f (see especially figures 4 and 14), and which pallet exchangers travel along a “track” 38 from one machine tool to another, and back and forth from a “pallet stocker” area 59/60, see Figure 4, for example, also col. 5, lines 7-21, for example. For example, “pallet exchanger” 61 is shown in Figures 8-12, and has a base, such as, for example, element 42 (other elements could likewise or alternatively be considered a base), a “pallet support member” including, for example, at least element 55 (see Figures 9-12) which “rotates” about vertical axis 68 “in an indexing manner” (see col. 6, lines 2-26, for example, and especially note the pivoting or rotating motion as illustrated in Figures 10-12, which illustrate the rotation movement of 55 about the vertical pivot axis 68, described specifically as vertical in col. 6, line 11). Further note that the “pallet support member”, which includes at least element 55, includes “at least two vertical pallet-mounting surfaces”, such as the vertical pallet gripping surfaces on the gripper jaws 56 of element 55 (note that in Figure 9, axis 68 is the vertical rotation axis, and that jaws 56 have pallet gripping surfaces extending into the plane of the paper that are parallel to that axis).

Re the new language in claim 1, it is noted that there would appear to be nothing preventing the gripper jaws 56 of element 55 from gripping two pallets at the same time such that one of the pallets contacted one of the gripper jaw 56 vertical surfaces and the other of the pallets contacted the other gripper jaw 56 vertical surface. Note the broad claim language “can be” only requires that the structure be capable of performing the function.

Additionally, re the claimed “pallet moving means”, note that the motor 69 and gearbox 66 are used to perform the rotation motion of 55 about the vertical axis 68, and are thus considered to be the claimed “pallet-moving means for moving the pallet (31), in a vertical

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state”, between the table/pallet-mounting plate 26/29 and the “pallet support member” including at least 55 to thereby exchange the pallets (see Figures 8-14 and col. 6, lines 2-26).

Re claim 2, see Figures 4 and 14, noting that the “pallet support member” including, for example, at least element 55, is movable along the track or conveyor path 38 in a horizontal direction perpendicular to the horizontal spindle axis (see also Figure 1, noting the configuration and location of path 38 relative to the horizontal spindle axis) to positions such that it is “arranged in the extension of said table or said pallet mount in the horizontal direction perpendicular to the spindle axis” as claimed.

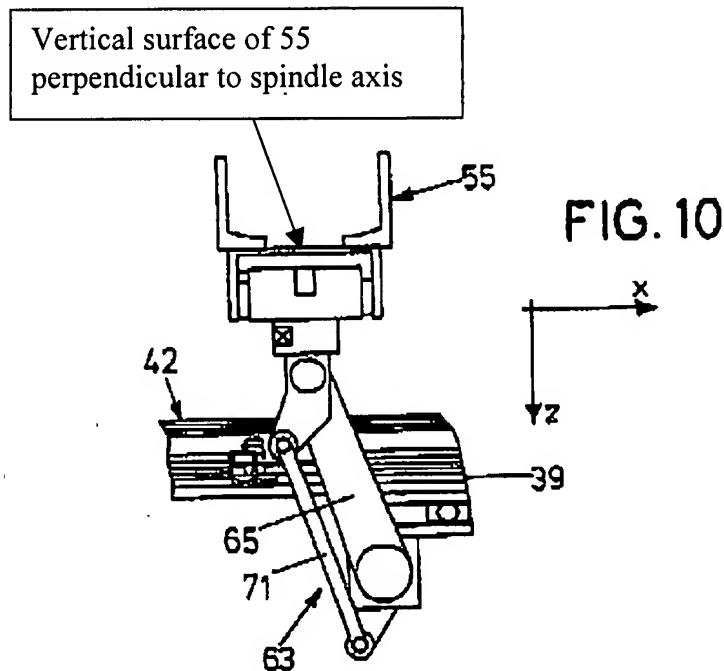
Additionally, re claim 2, note that the “pallet support member” including, for example, at least element 55, on a side (such as the right side as viewed in Figures 1, 9, and the top side as viewed in Figures 10-12, noting the orientation of 38/39 shown in Figures 9-12) of the pallet support member (55 would be located at the left of Figure 1) where the pallet 31 moves when it is held by 29 (see Figure 1), is able to be arranged “in parallel” to a pallet mounting surface of the table/pallet mount 26/29 (see Figures 1 and 9-14, for example).

Also, re the new language in claim 2, note that the “table” or “pallet mount” 26/26 has surfaces (at least the vertical left and right surfaces as viewed in Figure 1) that extend perpendicularly to the horizontal spindle Z axis (see Figure 1). Note also that the “pallet support member” including at least element 55 is movable to a position in the horizontal direction perpendicular to the spindle axis (along path 38, for example, as shown in Figure 4) such that it can be considered to be “arranged” in an extension (see Figure 1, noting that the path 38 is ultimately connected to/ultimately extends from the table/pallet mount 26/29) of the table/pallet-mount 26/29).

Furthermore, note that the “pallet support member” (including at least element 55) includes a vertical surface that is arranged such that it is capable of contacting a pallet surface

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and that is arranged in parallel to the “pallet mounting surface” of the “pallet mount” 26/29 that is perpendicular to the spindle axis as labeled below in Figure 10 (noting that Figure 10 is a top view).



Note also that it does not appear that claim 2 requires the “pallet mounting surface of said pallet mount” to be perpendicular to the spindle axis, and that the previously described vertical mounting faces of the arms or jaws 56 are parallel to the pallet mounting surface of the pallet mount 26/29 at various points in time, again noting that 26/29 rotates about a vertical axis.

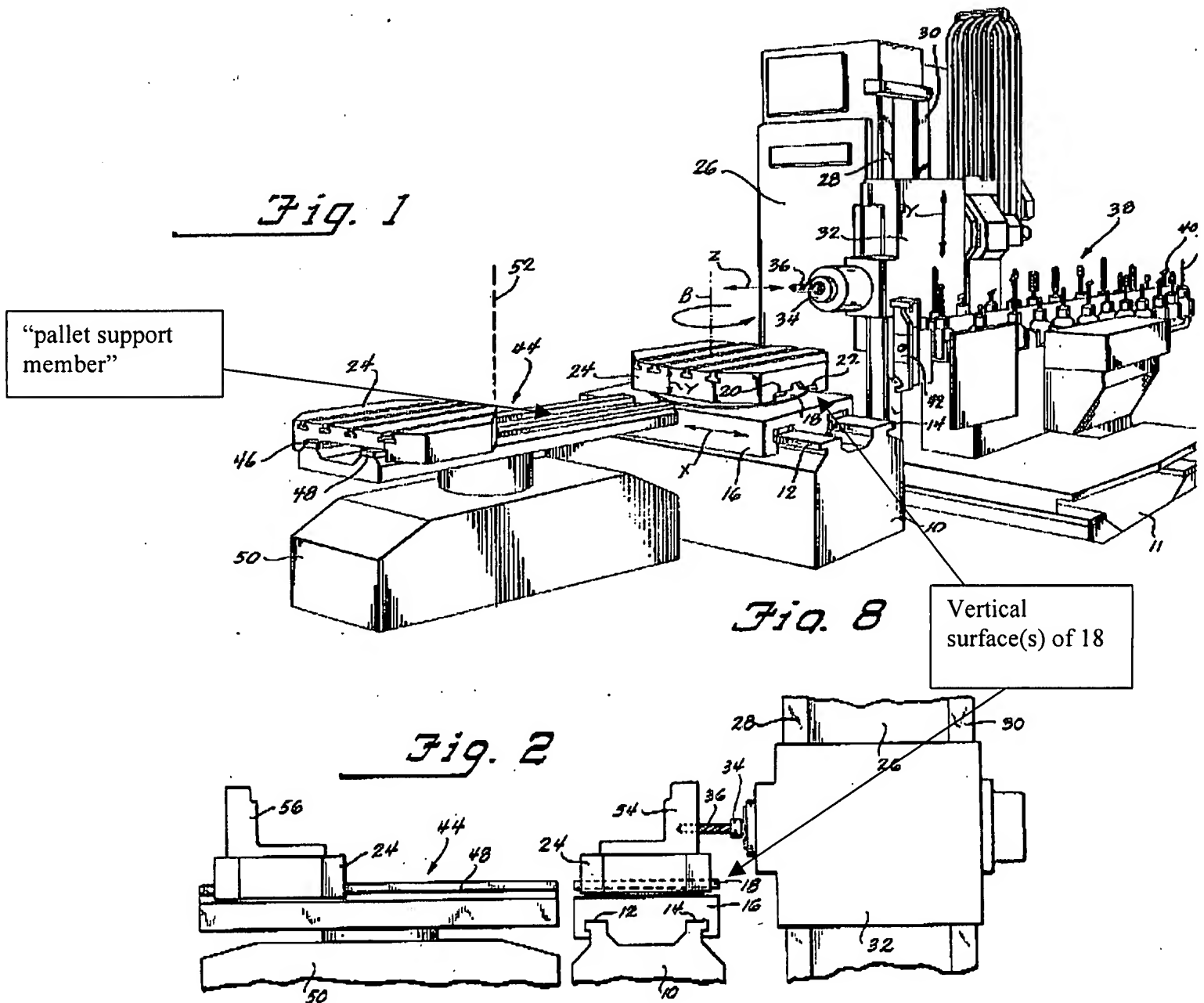
6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 4,090,287 to Selander, for example.

Note that tool 36 is rotated by a tool spindle about a horizontal axis, and that a pallet exchanging device 44 (Figures 1-2) for exchanging pallets 24 has a “pallet support member” (labeled below) that is rotatable about a vertical axis 52 (Figure 1). Also note that the “pallet



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support member" has at least two vertical "pallet mounting surfaces (vertical sides of the ways 46, 48 of the pallet support member) on which the pallets 24 are removably mounted.



Re the new language in claim 1, it is noted that the pallet support member vertical surfaces previously described can each have a "distinct pallet" removably mounted thereon,

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noting that a first distinct pallet is shown at the left of the pallet support member Figure 1, and a second distinct pallet is generally mounted at the other end of the pallet support member (the pallet that is shown on the member 16 in Figure 1, but that is explicitly shown on the pallet support member in at least Figures 2-4).

Table” or “pallet mount” 18 has a vertical surface that faces the spindle and that is perpendicular to the axis of the spindle, and when the table or pallet mount 18 is rotated about vertical axis B to the position shown in Figure 1, has a vertical surface perpendicular to the axis of the spindle on which the pallet 24 is “mounted”, as broadly claimed (see Figure 1 especially, see the reproduction of Figures 1-2 above).

Further note that pallet transfer bar 58 is driven to move horizontally to move the pallets 24 between the table/pallet mount 18 and the “pallet support member” (see Figure 3, col. 3, line 43 through col. 4, line 37, for example), and that as broadly claimed, the pallets 24 can be considered to be in a “vertical position” during the transfer since the pallets 24 have surfaces that remain vertical during the transfer (see Figures 2-3, for example).

### ***Response to Arguments***

7. Applicant's arguments filed August 9, 2007 have been fully considered but they are not persuasive.

8. Specifically regarding the rejection of claims 1-2 under 35 USC 102(b) in view of the Ota reference (US 2006/0260907), Applicant has asserted that since the Assignee and owner of both the present application and the Ota application (10/541,430, i.e., US 2006/0260907) are the same, the rejection under 35 USC 102(f) should now be withdrawn because “[S]ubject matter developed by another which qualifies as prior art under one or more subsections (e), (f), and (g)

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of Section 102 of 35 United States Code, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person”.

However, firstly, Examiner notes that Applicant has not provided any sort of statement or evidence that at the time the claimed invention was made, the two were owned by the same entity or subject to an obligation of assignment to the same entity.

Secondly, Examiner notes that even if such a statement or evidence was submitted, such would not be sufficient to preclude a rejection under 35 USC 102(f). Such a statement would only preclude a rejection under 35 USC 103(c) which was based on art that only qualified as prior art under one or more of subsections (e), (f), and (g) of section 102. See at least MPEP section 706.02(l)(1), for example, which teaches:

35 USC 103(c) only applies to prior art usable in an obviousness rejection under 35 USC 103. Subject matter that qualifies as anticipatory prior art under 35 USC 102 is not affected, and may still be used to reject claims as being anticipated.

Additionally, with respect to the Geiger and Selander references, Applicant has asserted that neither Geiger nor Selander teach “a pallet support member disposed adjacent to said table or said pallet mount and adapted to be rotationally indexed about a vertical axis, said pallet support member having at least two vertical pallet mounting surfaces on each of which a distinct pallet can be removably mounted”, with apparent emphasis on the “distinct pallet can be removably mounted” portion. However, this is not persuasive. Applicant’s attention is directed to the body of the rejections based on Geiger and Selander above, wherein Examiner has addressed this new limitation.

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***Conclusion***

9. Applicant's amendment necessitated any new ground(s) of rejection (e.g., any new issues with respect to 35 USC 112) presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

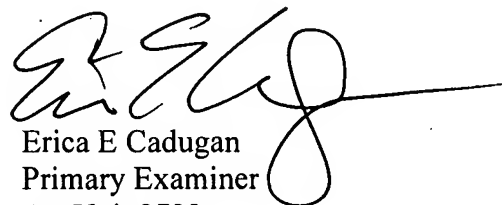
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E. Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on M-F, 6:30 a.m. to 4:00 p.m., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Erica E Cadugan  
Primary Examiner  
Art Unit 3722

eec  
October 11, 2007